

IN THE CLAIMS:

Please cancel Claims 1-26 without prejudice.

Please add the following newly-drafted Claims 27 to 37.

1 A 11 27. (New) An optical disc comprising:
2 a plurality of title groups of audio and video information and control information which
3 permit a reproduction unit to vary the sequence of reproduction of the video and audio information;
4 at least one of the title groups of audio and video information include route information
5 which provide a fixed order of reproduction;
6 at least another of the title groups of audio and video information include branch
7 information which can enable a variable order of reproduction; and
8 reproduction information for indicating the status of each of the title groups including one of
9 a fixed order of reproduction and a variable order of reproduction whereby the reproduction unit can
10 immediately determine from the reproduction information whether the sequence of reproduction for
11 a title group can be varied without searching through the entire audio and video information of the
12 title group.

1 28. (New) The optical disc of Claim 27, wherein the fixed order of reproduction can be
2 determined by a combination of flag values including a first flag that indicates the title group can be
3 reproduced from a single piece of route information and a second flag that indicates that route
4 information does not include branch information.

1 29. (New) A disc reproduction apparatus and optical disc system, the optical disc
2 comprising:

3 a title area with a plurality of video titles and a manager area, each video title includes route
4 information and a plurality of pieces of video information retrieved according to the route
5 information, the manager area includes an address management information area for storing a
6 plurality of pieces of address management information, each of which includes an address of one of
7 the plurality of video titles; and

8 reproduction information for indicating a status of each of the video titles relative to
9 enabling a variable sequence of reproduction by the disc reproduction apparatus; and
10 the disc reproduction apparatus comprising:

11 an optical disc pickup for optically reading data from the optical disc;

12 a drive mechanism for driving the optical pickup;

13 first controlling means for controlling the drive mechanism to have the optical pickup read
14 data from the manager area;

15 a manager buffer for storing the data read by the first controlling means;

16 receiving means for receiving a video title selected by an operator to be reproduced;

17 calculating means for calculating an address of the video title selected by the operator by
18 referring to the manager buffer;

19 second controlling means for controlling the drive mechanism to move the optical pickup

20 and to have the video title read from a position specified by the address calculated by the calculating
21 means;

22 judging means for judging whether a variable sequence of reproduction can be executed in
23 the video title read by the second controlling means by referring to the reproduction information
24 corresponding to the video title; and

25 a user executing means for executing a user selected variable reproduction sequence of the
26 pieces of video information only when the judging means judges that such a user selection can be
27 used in the video title.

1 30. (New) An optical disc comprising:

2 a plurality of pieces of information representing a plurality of titles;

3 route information defining a reproduction route by specifying at least one
4 reproductive order of the plurality of pieces of image information; and

5 disc reproduction information including branch status information indicating for
6 each title whether a branch during its reproduction is possible.

1 31. (New) The optical disc of Claim 30, wherein the plurality of pieces of
2 information include:

3 command regions storing commands;

4 the commands stored in the command regions form part of the route information;

5 the commands include a command that shows at least one piece of image
6 information that is allowed to branch during reproduction; and

7 the disc reproduction information indicates that a reproduction route defined by
8 the route information is a non-branch type if no commands that indicate pieces of image
9 information that are allowed to branch are stored in the command regions.

1 32. (New) The optical disc of Claim 30, including:
2 a control region for storing linking information and commands separately to the
3 plurality of pieces of image information;
4 the linking information being part of the route information and showing a piece of
5 image information that is reproduced after each piece of image information;
6 the commands being part of the route information controlling reproduction of the
7 plurality of pieces of image information;
8 including pieces of image information that are allowed to branch irrespective of
9 pieces of image information shown by the linking information; and
10 the disc reproduction information indicates that a reproduction route defined by
11 the route information is a non-branch type if no commands that indicate pieces of image
12 information that are allowed to branch are stored in the command regions.

1 33. (New) The optical disc of Claim 30, wherein each piece of information
2 includes:
3 a series of video objects;
4 the route information includes:
5 at least one piece of program chain (PGC) information that shows a reproduction
6 order for certain video objects;
7 position information showing positions on the optical disc of the video objects
8 shown by each piece of PGC information;
9 PGC linking information showing how pieces of PGC information are linked
10 together;

11 a command table showing three pieces of PGC information that branch during
12 reproduction to other pieces of PGC information that are different from the PGC
13 information provided in the PGC linking information; and
14 the disc reproduction information indicates whether a reproduction route defined
15 by the route information is a first type that is expressed by a single piece of PGC
16 information or a second type that is expressed by a plurality of pieces of PGC
17 information.

1 34. (New) The optical disc of Claim 30, wherein the disc reproduction
2 information is formatted for storage in a disc reproduction device when the optical disc is
3 initially loaded into the disc reproduction device and includes:
4 menu information for displaying to a user the plurality of titles in a menu format;
5 and
6 indicator information for indicating for each title whether a branch during
7 reproduction is possible.

1 35. (New) A reproduction apparatus for reproducing the optical disc of Claim
2 30, comprising:
3 reading means for reading a piece of image information, route information, and
4 disc reproduction information from the optical disc and reproducing the piece of image
5 information;
6 a controller for controlling the reading means; and

7 a memory for storing available function information showing types of
8 reproduction routes for which execution of certain functions is allowed, based on
9 performance of the reproduction apparatus, wherein the controller:
10 has the reading means read the image information, the route information, and the
11 disc reproduction information from the optical disc;

A 11 has the reading means read and reproduce the image information in accordance
13 with the read route information; and
14 judges, when there is a request to execute one of the certain functions, whether
15 execution of the requested function is allowed, based on the read disc reproduction
16 information and the available function information in the memory.

1 36. (New) The reproduction apparatus of Claim 35 wherein the certain
2 functions include:
3 a search reproduction function that has reproduction commenced from a specified
4 position within a piece of image information.

1 37. (New) The reproduction apparatus of Claim 35 further comprising:
2 a feedback means that displays an index number of image information during
3 reproduction of the image information, wherein the certain functions include a feedback
4 function that displays the index number.